

*Therina fautaria* Streck. (3905) is *T. endropiaria* G. & R. (3908), worn and with the lines unusually approximate. I have such a specimen from Maine.

*Euchlæna amethystaria* Streck. (3959). I cannot separate it from *Gonodontis hypochraria* H.-S. (3941).

*Priocycla jucundaria* Streck. (3992) appears to me an aberrational form of *P. armantaria* H.-S. (3990).

*Sabulodes nonangulata* Streck. (4021) is probably only a variety of *S. caberata* Gn. (4020).

#### Family COCHLIDIIDÆ.

*Kronæa minuta* Reak. The types should be in the Strecker collection; a specimen of the European *Heterogenea asella* is so labelled, but of course incorrectly.

The following paper was then read by title:

#### DESCRIPTIONS OF NEW AMERICAN SPIDERS.

BY NATHAN BANKS.

In the following pages are descriptions of some sixteen new spiders from various parts of our country, most of them from the far West. They are presented now as I wish to have them in a catalogue of our spiders which is now about ready for publication. Among them are three genera new to the United States.

##### *Modisimus texanus*, n. sp.

Cephalothorax pale yellowish, with a broad, median, black stripe, tapering a little behind, eyes on black spots, but the middle of the eye-tubercle is pale, two black stripes from eyes down upon clypeus, and fainter on mandibles; legs pale, femora with from 6 to 12 brown marks below, near apex forming rings, the last preapical and broader than others, a mark over articulation of patella and tibia, and a preapical band on tibia brown. Sternum brown, pale in middle, abdomen pale, with many black and white spots above and behind, leaving a pale median stripe and a line each side; venter pale, with a median black dot. Eyes upon a considerable elevation, almost as high as length of mandibles; A. M. E. practically wanting. Legs very slender, femur i over four times as long as cephalothorax; abdomen high, subglobose, rather pointed at spinnerets; epigynum projecting forward in a sharp point.

Length 2.7 mm.

Austin, Texas, March, kindly given me by Prof. J. H. Comstock.

*Avicularia californica* n. sp.

Cephalothorax densely clothed with yellowish-gray hair, rather paler on sides and brighter in the middle; on anterior margin is a fringe overhanging the mandibles of long, pale gray hairs with tawny tips; eye tubercle with some long, partly recurved, bristles on middle, their bases tawny, and their tips pale. The mandibles are densely clothed above, with yellowish-gray appressed hair, and long, procurved bristles, whose bases are tawny, and tips pale. Sternum and coxæ black, with short fine grayish hair, and long, erect, partly tawny bristles. Legs densely clothed with yellowish-gray hair, and long, procurved bristles, except above on the femora, where there are only a few bristles near tip; the under sides of the legs are darker than upper side; and there is a dense black scopula beneath metatarsi and tarsi; there are two or three spines beneath on metatarsus iv toward base. Abdomen clothed above with fine dark brown hair, and many long, recurved bristles of a tawny color with pale tips; venter black-haired, and with long tawny bristles, especially noticeable on the posterior sides. Maxillæ and fang-grooves with long tawny bristles.

Length of cephalothorax, 28 mm.; width 16 mm.

Several specimens from the vicinity of San Diego, California.

*Cybæus minutus* n. sp.

Entirely dull yellowish, the cephalothorax and legs rather brighter than the abdomen; eyes on black spots. Cephalothorax not very slender; posterior eye-row a trifle recurved, P. M. E. more than diameter apart, and scarcely farther from equal P. S. E., anterior eye-row almost recurved; A. M. E. small, and about diameter apart, and closer to larger A. S. E., S. E. separate by radius; quadrangle of M. E. much narrower in front. Mandibles not strongly geniculate. Legs of moderate length, 4-4 spines under tibiæ i and ii; sternum rather broad; metatarsi i not scopulate. Abdomen short and broad; epigynum reddish, swollen, showing beneath a cavity in each posterior side.

Length 3.5 mm.

One female from Olympia, Washington. Distinguished by small size, and pale color.

*Argyrodes pluto* n. sp.

Deep jet black, except a few glittering patches of yellowish near summit of abdomen; an oblique spot each side, two transverse dots above before apex, and a semicircle partly around apex. Abdomen higher than long, not projecting beyond spinnerets, but very high directly over spinnerets and ending in a rather sharp point, the posterior margin (seen from side) and the dorsal margin slightly convex. The abdomen (seen from above) is rather broad in middle, more so than in most species. The first legs are long, but scarcely as long proportionately as in *A. trigonum*.

Length 4 mm.; abdomen high, 2.8 mm.: tibia i, 2 mm.

One female taken near Falls Church, Va., 23 June, 1904, in web of a *Lathroedectes mactans*; *A. trigonum* in the same web. It is our largest eastern species of the genus, and very distinct by nearly uniform black color.

*Dipæna tibialis* n. sp.

Cephalothorax blackish, black on eye region; mandibles and palpi pale yellowish; legs reddish-yellow, anterior femora very bright, patellæ and tibiæ i and ii all black, as well as tip of metatarsi i and ii, tibiæ and metatarsi iv black on tips; sternum black; abdomen dull black above and below. Cephalothorax slender, eye region very high and projecting over the concave clypeus. P. M. E. less than diameter apart, plainly farther from nearly equal P. S. E.; A. M. E. slightly larger than P. M. E., and about two diameters apart, much closer to the slightly smaller A. S. E. Palpi heavy. Legs rather short; abdomen oblong-elliptical, the broad tip extending much beyond spinnerets.

Length 3.5 mm.

Two females from Olympia, Washington. Readily known by contrasting colors of the legs.

*Crustulina pallipes* n. sp.

Cephalothorax and sternum dark red-brown, abdomen dark brown above, almost black beneath, spinnerets pale, and sometimes a pale dot each side of them; legs pale yellowish or reddish-yellow. Cephalothorax short and broad, elevated in eye region; P. M. E. about diameter apart, and as far from the barely equal P. S. E.; A. M. E. scarcely as large as P. M. E., fully diameter apart, and closer to A. S. E.; quadrangle of M. E. rather broader behind than in front, and a little broader than high; clypeus concave; mandibles slender, longer than height of clypeus; sternum barely longer than broad, and broadly rounded or almost truncate between the hind coxæ, its surface is scabrous. Legs slender, but rather short, first pair but little longer than fourth, all rather heavily clothed with hairs and bristles. Abdomen very broad, sometimes fully as broad or broader than long.

Length 2.2 mm.

Several females from Olympia, Washington (Kincaid).

*Gonglydium kincaidi* n. sp.

Cephalothorax yellow-brown, black around eyes, a black marginal seam, and a black median line; legs and mandibles pale yellowish, sternum darker brown; abdomen black above and below; on dorsum there is a submedian row each side of five transverse white marks, nearly touching each other and the apical pair connected. Cephalothorax rather broad, head scarcely elevated; P. M. E. one and one-half diameter apart, and as far from the equal P. S. E., A. M. E. small and close together,

Mandibles unarmed; male palpi short and small; sternum triangular, very broad, pointed behind; abdomen rather short and broad, not flattened; legs moderately slender, without spines, tarsi i fully three-fourths of metatarsi i.

Length 1.5 mm.

One male from Olympia, Washington (Kincaid).

*Exechophysis nigriceps* n. sp.

Cephalothorax yellow, head black, clypeus lighter, dorsum of abdomen with a reddish shield, with black hairs, venter dark gray, sternum yellow-brown, darker on edges; femora, patellæ and tibiæ brownish, other joints yellowish, spinnerets pale. Head elevated and projecting forward, short stiff hairs on anterior part of elevation; posterior row of eyes nearly straight, anterior row a little procurved, the A. M. E. much smaller and closer together than the P. M. E. Hind legs much the longest, no spines above on tibiæ, but some stiff bristles below on tibiæ and metatarsi; sternum broad, triangular, projecting between the hind coxæ on the venter near spinnerets is a curved transverse line which looks like a furrow.

Length ♂ 1.3 mm.

One ♂ from a swamp near Ithaca, N. Y., in May. A ♀ from Sea Cliff, N. Y., which is possibly this species, has the eyes similar, the head elevated and swollen in front, there is no shield on the abdomen, the whole color paler, the head, however, is black, the legs white and more slender than in the ♂.

*Exechophysis palustris* n. sp.

Cephalothorax yellow-brown, darker around head; abdomen blackish (a little discolored); palpi quite dark; legs bright yellow; venter dark gray; sternum yellow-brown, darker on edges; spinnerets pale. There is a hard shield covering the dorsum of abdomen; the head is much narrower and more pointed than in *E. nigriceps*; the palpi are quite different from that species, the tibial joint being greatly enlarged; otherwise it is very similar to *E. nigriceps*.

Length 1.5 mm.

Two males from Ellis Hollow Swamp, and Fall Creek, Ithaca, N. Y., in May.

*Linyphia bicolor* n. sp.

Cephalothorax reddish-yellow; eyes on one large black spot; legs reddish-yellow on basal part, brownish toward tips; mandibles reddish; sternum black; maxillæ black on basal outer side, the inner apex yellowish; abdomen black above and below; cephalothorax broad behind, narrow in front; posterior eye-row barely recurved, P. M. E. one and one-half diameter apart, and two and one-half diameters from the equal P. S. E.; A. M. E. projecting forward, more than diameter apart, and twice as

far from the equal A. S. E.; the S. E. on a slight eminence, and barely separate; quadrangle of M. E. higher than broad, and nearly as broad in front as behind. Mandibles strongly convex in front, not very long. Abdomen in female subglobose, in male elliptical. Legs rather short, in female with few spines, more in male, especially on tibia i.

Length, ♀, 4 mm., ♂, 3 mm.

Olympia, Washington. Distinguished by contrast of color of maxillæ, as well as by other characters.

*Bathyphantes pacifica* n. sp.

Cephalothorax reddish-yellow, a black marginal seam, sometimes a black median line, and the eyes on black spots; mandibles reddish, often showing an oblique blackish mark; sternum blackish; legs pale yellowish, coxæ, patellæ, and tibiæ narrowly black at tips beneath; abdomen pale above, with a median black herring-bone stripe, blackish sides, and venter, latter with a pale line each side and three large pale spots on base, one on each lung-plate, and one between them; sometimes the median stripe of dorsum is connected for a greater part of its length to the dark sides. Of the usual structure of genus; P. M. E. more than their diameter apart, and nearly as close to the equal P. S. E.; a small tooth in front on each mandible; legs not very long.

Length 2 mm.

Several specimens from Olympia, Washington.

*Tmeticus armatus* n. sp.

Cephalothorax reddish; mandibles similar, but paler on tips; legs reddish-yellow, paler toward tips; sternum reddish. Abdomen uniform brown above and below. Head elevated; posterior eye-row slightly procurved; P. M. E. about diameter apart, and plainly farther from equal P. S. E., the latter touching the equal A. S. E.; A. M. E. smaller than other eyes, and very close together, more than two diameters from the A. S. E.; quadrangle of M. E. much broader behind than in front, and much longer than broad. Legs rather slender, with many fine hairs, no spines; femur i as long as cephalothorax; legs i and iv subequal; tarsi much shorter than metatarsi; tibia i longer than metatarsus i. Mandibles of male each with a large, curved, pointed process on upper part in front, and below on inner side one rather slender tooth, and several minute ones in vicinity. Sternum triangular, produced behind between hind coxæ in a fine point. Abdomen elliptical.

Length, ♂, .5 mm.

One male from Manitoba, Canada. The trochanters of legs are very prominent; seen from above they are as long as broad.

*Phidippus texanus* n. sp.

Cephalothorax red-brown, black in eye-region, the reddish brown extends forward on sides up to A. M. E.; clypeus with a fringe of white hairs above mandibles; white hair over and between A. M. E., a tuft of



bristles in front of dorsal eyes, and a smaller tuft lower down behind A. S. E.; many long erect black hairs on cephalothorax; mandibles iridescent green in front, base clothed with golden scales; legs reddish brown to very dark, the tip of joints darker, and tibia i with black apical half; all, but more especially the front pair, clothed with long white hair below and on sides, and erect black hair above; sternum dark; venter pale, unmarked except a fine dusky median line on basal half; dorsum brown, pale on sides, with two oblique white bars, white at base, extending back each side, and two approximate dark stripes on apical half, rather farther forward separated by a narrow, but very distinct, white stripe, connected to a larger spot in front. In each dark stripe are two white dots, sometimes connected to the median white line. This mark resembles that figured for *P. albomaculatus* by Peckham.

Length 12 mm.

A few females from Brazos Co., Texas, Sept. Also sent me by Mr. Scheffer from Kansas.

*Pellenes formosus* n. sp.

Cephalothorax pale yellowish; eye-region black, clothed with short white hair, especially prominent as a crest over the first eye-row; a large triangular black spot in the middle behind, and a brown stripe on each side; clypeus with snow-white hair, mandibles white, with a large, black, basal spot; palpi pale, the tarsi black, but with some white hairs; legs pale; femur i black toward tip, especially on outer side, patella black on outer side, tibia with a brown streak each side; femur ii blackish on inner side, brown streaks on patella and tibia; femur iii with an oblique black mark on anterior basal part, patella with three black dashes in front, one basal, two apical, tip broad; tibia iii with two dark streaks in front; femur iv with a black apical mark, and a band at base and at apex of the tibia; all legs with much long white hair, a ridge under femur i of especially long hair, and more on outer side of tibia i; the three spines on inner side of tibia i are large and flattened, a similar spine on inner side of patella i. Sternum pale; venter pale, with three dark stripes; dorsum pale, a basal black band, and two brown stripes above, joined behind, and leaving a rather reddish area between them.

Length 5 mm.

One male from Yuma, Arizona, August.

*Hycia robusta* n. sp.

Cephalothorax yellowish, eye-region blackish, thoracic part with some irregular streaks of blackish; some white hair around eyes, and dense long white hair in front on clypeus; a tuft of curved black bristles behind each lateral eye; legs pale yellowish, first pair rather reddish; mandibles reddish; palpi pale yellowish, with a black line each side, and clothed with long white hair; sternum pale yellowish; abdomen yellowish, with a dark indistinct stripe each side above, made up of brown streaks and

points; venter wholly pale. Structure similar to *H. pikei*, but more robust; cephalothorax rather broader; leg i heavy, 4-4 spines under tibia i, and one above base of first of inner series, one spine on inner side of patella i, and three in a transverse row near tip of femur i; hind metatarsi spined only at tip, and tibia iv with but one sub-basal and an apical pair below. Abdomen about four times as long as broad, truncate at base, with crest of hairs, sides sub-parallel.

Length 8.5 mm.

One female from Arizona (Townsend).

*Plexippus vittatus*, n. sp.

Cephalothorax pale yellowish brown, eye-region blackish, rather paler in middle, a row of about ten curved black bristles below side of eye region, much short white hair around eyes; clypeus pale yellowish brown, as also mandibles, palpi, and legs, on the under side of femur i near tip are two short transverse black bars; sternum and venter pale; dorsum of abdomen with a straight jet-black stripe each side from base to tip, and between them a broad stripe of white. The structure is similar to *P. paykulli* in many respects; leg i is plainly thicker than others, and rather long, there are 4-4 spines under tibia i and one above base of first of inner series, one on inner side of patella i, and five or six above toward tip of femur; tibiæ and metatarsi iii and iv have long spines near base and middle as well as at tip. Abdomen about three times as long as broad.

Length 9 mm.

Female from Arizona (Townsend).

#### EXPLANATION OF PLATE II.

- Fig. 1.—*Gonglydium kincaidi*, male palpus.  
 2.—*Bathyphantes pacifica*, male palpus.  
 3.—*Bathyphantes pacifica*, male palpus.  
 4.—*Exechophysis palustris*, male palpus.  
 5.—*Hyctia robusta*, vulva.  
 6.—*Plexippus vittatus*, vulva.  
 7.—*Gonglydium kincaidi*, male palpus.  
 8.—*Exechophysis palustris*, head of male.  
 9.—*Exechophysis palustris*, male palpus.  
 10.—*Exechophysis nigriceps*, side view of male.  
 11.—*Exechophysis nigriceps*, male palpus.  
 12.—*Tmeticus armatus*, male palpus and mandible.  
 13.—*Pellenes formosus*, patella iii of male.  
 14.—*Pellenes formosus*, male palpus.  
 15.—*Crustulina pallipes*, vulva.  
 16.—*Bathyphantes pacifica*, vulva.



PLATE II.  
NEW AMERICAN SPIDERS.